DEQ

## Michigan Department of Environmental Quality Waste and Hazardous Materials Division

## SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: Oakland Heights Development, Inc.

LICENSEE/OPERATOR: Oakland Heights Development, Inc.

FACILITY OWNER: Oakland Heights Development, Inc.

PROPERTY OWNER: Oakland Heights Development, Inc.

FACILITY TYPE(S): Municipal Solid Waste Landfill

FACILITY ID NUMBER: 470494

COUNTY: Oakland

LICENSE NUMBER: 9185

ISSUE DATE: October 29, 2008

EXPIRATION DATE: October 29, 2013

FACILITY DESCRIPTION: The Oakland Heights Development, Inc., site, a municipal solid waste landfill, consists of

133.61 acres located in the northwest quarter of Section 2, Township 3 North, Range 10 East, at

2350 Brown Road in the city of Auburn Hills, Oakland County, Michigan, as identified in

Attachment A (Sheets 1 and 2) and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: Identified in Item 2 of the license.

RESPONSIBLE PARTY: Mr. Bill Dolsen, Site Manager

Oakland Heights Development, Inc.

2350 Brown Road

Auburn Hills, Michigan 48326

248-373-2334

**RENEWAL OPERATING LICENSE:** This License Number 9185 supersedes and replaces Solid Waste Disposal Area Operating License Number 8975 issued to Oakland Heights Development, Inc., on November 14, 2003.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Storage Tank and Solid Waste Section

Waste and Hazardous Materials Division

Operating License Number: 9185 Issue Date: October 29, 2008

The licensee shall comply with all terms of this license and the provisions of Part 115 and the administrative rules implementing Part 115 (Part 115 Rules). This license includes the license application and any attachments to this license.

- 1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.
- 2. The following portions of the Facility are authorized to receive solid waste by this license:

ACTIVE PORTIONS NOT AT FINAL GRADE: The area(s) identified as Phase 1 (2.3 acres), Cell A (11.87 acres), Cell A Berm (0.25 acres), Cell A Overfill (3.41 acres), Cell B South (8.60 acres), Cell B South Berm (0.24 acres), Cell B South Overfill (2.90 acres), Cell B North (4.81 acres), Cell B North Berm (0.11acres), Cell B North Overfill (1.77 acres), Cell C South (5.30 acres), Cell C South Phase 1 Overfill (1.88 acres), Cell C North (5.75 acres), Cell C North Phase 1 Overfill (0.25 acres), and Cell C Berm (0.2 acres), Cell D (1.58 acres) Phase 3 Perimeter Berm Northeast (0.51 acres), Phase 3 Perimeter Berm Southeast (0.32 acres), Phase 3 Perimeter Berm West (0.28), and Phase 1 Overfill (6.72 acres) were authorized to receive waste by the previous license. This area's total acreage is 59.05 acres.

3. The following portions of the Facility **WILL BE** authorized to receive solid waste by this license following approval by the Michigan Department of Environmental Quality (MDEQ) of construction certification:

**UNCONSTRUCTED AREA(S) WITH FINANCIAL ASSURANCE:** The area(s) identified as Cell E (9.51 acres) and Cell E Phase 1 Overfill (the acreage of which is accounted for in Item 1a.), totaling 9.51 acres of new cell area and 8.5 acres of overfill area (acreage included in Item 1a.) acres are included in the calculation of financial assurance as required by Section 11523 of Part 115. This portion(s) of the Facility shall be authorized to receive waste, as part of this license, when acceptable certification is submitted to the MDEQ, as required by Section 11516(5) of Part 115, and determined by the MDEQ to be consistent with Part 115 and the Part 115 Rules. The certification shall verify that construction of this area(s) was in accordance with the Construction Permit(s) listed in Item 8 of this license, Part 115, and the Part 115 Rules.

- 4. The following portions of the Facility are **NOT** authorized to receive solid waste by this license:
  - a. **UNCLOSED AREA(S):** The area(s) identified as Phase 1 Final Cover 2003 (3.05 acres), Phase 1 Final Cover 2004 (4.84 acres) and Final Cover 2005 (9.16 acres) are at final grade but have not had final cover certification approved by the MDEQ. This area's total acreage is 17.05 acres.
  - b. CLOSED UNIT(S) OR A PORTION OF A UNIT WHERE THE FINAL COVER HAS BEEN CERTIFIED CLOSED AND ACCEPTED BY THE MDEQ: The following unit(s) and/or portion(s) are closed:

**EXISTING UNIT(S):** Portions of the landfill unit identified as Phase 1 Final Cover, 4.67 acres (2001) and Phase 1 Final Cover, 3.68 acres (2002) had final closure certified on October 26, 2001, and October 28, 2002, respectively. This certification was reviewed and approved by the MDEQ on June 14, 2004. This area's total acreage is 8.35 acres.

- 5. The attached map (Attachment A Sheets 1 and 2) shows the Facility, the area permitted for construction, monitoring points, leachate storage units, site roads, other disposal areas, and related appurtenances.
- 6. Issuance of this license is conditioned on the accuracy of the information submitted by the Applicant in the Application for License to Operate a Solid Waste Disposal Area (Application) received by the MDEQ on June 18, 2008, and any subsequent amendments. Any material or intentional inaccuracies found in that information is grounds for the revocation or modification of this license and may be grounds for enforcement action. The licensee shall inform the MDEQ's Waste and Hazardous Materials Division (WHMD), Southeast Michigan District Supervisor, of any inaccuracies in the information in the Application upon discovery.

Operating License Number: 9185 Issue Date: October 29, 2008

- 7. This license is issued based on the MDEQ's review of the Application, submitted by Oakland Heights Development, Inc., for the Oakland Heights Development, Inc., dated June 17, 2008, and revised on August 28, 2008. The Application consists of the following:
  - a. Application Form EQP 5507.
  - b. Application fee in the amount of \$10,000.00.
  - c. Certification of construction by N/A.
  - d. Waste Characterization: N/A.
  - e. Restrictive Covenant:

A restrictive covenant on 144.17 acres signed by the Applicant on April 30, 2008, was included in the Application and will be signed by the MDEQ and filed with the Oakland County Register of Deeds.

- f. Perpetual Care Fund Agreement, established as a trust account, signed by Mr. Steve Martin, Controller, Wayne Disposal, Inc., on May 24, 1997, was executed by the MDEQ on May 30, 1997.
- g. Financial Assurance.
  - i. Financial Assurance Required:

The amount of financial assurance required for this Facility was calculated based on the calculation worksheet form EQP 5507A entitled, "Form A, Financial Assurance Required," and is \$8,142,980.00.

The Facility has provided financial assurance totaling \$8,142,982.69, based on the requirements of Section 11523 of Part 115, consisting of a combination of the Perpetual Care Fund established under Section 11525 of Part 115, bonds, and the financial capability of the Applicant as evidenced by a financial test. The financial assurance mechanisms used by the Facility are summarized below in Items ii and iii, respectively.

- ii. Financial Assurance Provided Via a Perpetual Care Fund:
  - (1) The amount of the required financial assurance can be reduced pursuant to Section 11524 of Part 115, if the amount of money in the Perpetual Care Fund plus the amount of the reduced financial assurance equals the amount of financial assurance required in Section 11523 of Part 115 and is approved by the MDEQ.
  - (2) The Perpetual Care Fund Agreement statement showed a balance of \$1,734,319.59 in the Facility's Perpetual Care Fund as of March 31, 2008. Of this amount, the MDEQ has granted the request to use \$1,734,319.00 toward the total amount of financial assurance required.
- iii. Financial Assurance Provided Via Bond:

The following financial assurance has been received from the Applicant to meet the amount of financial assurance required:

Surety Bond

\$6,408,663.69

Total Amount Received:

\$6,408,663.69

Operating License Number: 9185 Issue Date: October 29, 2008

iv. Financial Assurance Updates Required:

For Type II landfills, the financial assurance cost estimates of closure and postclosure activities must be updated annually and the corresponding requisite amount of financial assurance must be adjusted annually for the costs of inflation. The corresponding financial assurance, as adjusted for inflation and other factors, is due on October 29, 2009, and each year thereafter.

- 8. The following documents approved with Construction Permit Number(s) 0073 issued to Northeast Landfill, Inc., on July 8, 1982, Construction Permit Number 0406 issued to Northeast Landfill, Inc., on February 16, 1989, Construction Permit Number 0315 issued to Wayne Disposal Oakland, Inc., on February 22, 1995, Construction Permit Number 0374 issued to Oakland Heights Development, Inc., on July 16, 1999, Construction Permit Number 4064 issued to Oakland Heights Development, Inc., on June 18, 2004, and Construction Permit Number 4091 issued to Oakland Heights Development, Inc., on March 14, 2008, are incorporated in this license by reference:
  - a. Engineering plans titled "A proposed Landfill in Pontiac Township, Michigan," prepared by Johnson & Anderson, Inc., dated August 10, 1981, and revised September 13, 1985.
  - Engineering plans titled "Construction Development Plan, Wayne Disposal Oakland," prepared by Johnson & Anderson, Inc., approved by the MDEQ on February 16, 1989.
  - c. Engineering report, titled "Wayne Disposal Oakland, Inc., Type II Sanitary Landfill Phase 2 Expansion Michigan Act 641 Construction Permit Application, Volumes I-V," dated September 1994.
  - d. Engineering plans titled "Wayne Disposal Oakland Landfill Phase 2 Expansion Construction Permit Plans, prepared by Midwestern Consulting," dated September 1994.
  - e. Engineering plans titled "Oakland Heights Development, Inc., Landfill Phase 3 Expansion, Construction Permit Plans," dated March 1999.
  - f. Engineering report titled "Oakland Heights Development, Inc., Landfill Part 115 Construction Permit Application, Type II Landfill, Phase 3 Expansion, Volumes 1 and 2," dated March 19, 1999.
  - g. "Hydrogeological Monitoring Plan" contained within the report titled "Oakland Heights Development, Inc., Landfill, Part 115 Construction Permit Application, Type II Landfill, Phase 3 Expansion, Volumes III and IV," dated March 19, 1999, amended July 13, 1999, and November 2001.
  - h. Engineering and hydrogeological report contained within documents titled "Oakland Heights Development, Phase 4 Expansion, Volume 1-2," prepared by STS Consultants, Ltd., dated December 2003, and revised February 2004, May 20, 2004, and May 24, 2004.
  - Engineering plans consisting of 18 sheets titled "Oakland Heights Development Inc., Construction Permit Application, Phase 4 Expansion, City of Auburn Hills, Oakland County, Michigan," prepared by STS Consultants, Ltd., dated December 2003, revised May 19, 2004, and May 21, 2004.
  - j. Document titled "Solid Waste Disposal Area Construction Permit Application Cell E Expansion" Volumes 1, 2, and 3, prepared by Golder Associates, dated February 2007, and revised in October 2007, January 2008, and February 2008. Revisions were received by the MDEQ on October 31, 2007, January 22, 2008, January 29, 2008, January 31, 2008, February 7, 2008, February 13, 2008, and February 15, 2008.
  - k. Engineering drawings, numbered 1 through 24, in the Engineering Plan Set titled "Construction Permit Application, Oakland Heights Development Landfill, Auburn Hills, Oakland County, Michigan," prepared by Golder Associates, dated February 2007, and revised in January 2008 and February 2008. Revisions were received by the MDEQ on January 22, 2008, January 29, 2008, February 7, 2008, and February 8, 2008.

Operating License Number: 9185 Issue Date: October 29, 2008

- I. "Hydrogeologic Monitoring Plan," prepared by Golder Associates, dated February 2007 and revised August 2007 and January 2008, submitted as Volume 3 of the "Solid Waste Disposal Area Construction Permit Application Cell E Expansion" application package.
- 9. The following additional documents, approved since the issuance of the construction permit(s) referenced in Item 8, are incorporated in this license by reference:
  - Engineering Report for the Construction Certification for Cell 1 approved by the MDEQ on October 18, 1985.
  - b. Engineering Report for the Construction Certification for Cell 2 approved by the MDEQ on December 15, 1986.
  - c. Engineering Report for the Construction Certification for Cell 3 approved by the MDEQ on December 23, 1987.
  - d. Engineering Report for the Construction Certification for Cell 4a approved by the MDEQ on September 30, 1988.
  - Engineering Report for the Construction Certification for Cell 4b approved by the MDEQ on April 10, 1989.
  - f. Engineering Report for the Construction Certification for Cell 5 approved by the MDEQ on December 15, 1989.
  - g. Engineering Report for the Construction Certification for Cell 6 approved by the MDEQ on April 8, 1991.
  - h. Engineering "as-built" elevations for fill Areas 1 6, prepared by Johnson & Anderson, Inc., dated July 29, 1985, and revised September 9, 1985, September 29, 1986, November 19, 1986, May 18, 1987, August 21, 1987, July 7, 1988, December 22, 1988, April 3, 1989, August 24, 1989, and November 19, 1990.
  - i. Engineering report titled "Construction Certification Phase 2 Expansion Cell A Type II Sanitary Landfill Wayne Disposal Oakland, Inc., Volumes I-IV," prepared by NTH Consultants, Ltd., dated March 1, 1996.
  - j. Engineering plans titled "Wayne Disposal Oakland Landfill, Phase 2 Expansion, Cell A Record Drawings," prepared by McNeely & Lincoln Associates, Inc., dated March 1, 1996.
  - k. Engineering report titled "Construction Certification Phase 2 Expansion Cell B-South Type II Sanitary Landfill Wayne Disposal Oakland, Inc., Volumes I-III," prepared by NTH Consultants, Ltd., dated March 1997.
  - I. Engineering report titled "Construction Certification Phase 2 Expansion Southern Phase 1 Overfill Area Type II Sanitary Landfill Wayne Disposal Oakland, Inc.," prepared by NTH Consultants, Ltd., dated December 1997.
  - m. Engineering report titled "Construction Certification Phase 2 Expansion Cell B-North Type II Sanitary Landfill Oakland Heights Development, Inc., Landfill, Volumes I and II," prepared by NTH Consultants, Ltd., dated August 1998.
  - n. Revised Intra-well Background Statistical Limits petition prepared by GeoChem, Inc., dated July 13, 1999.
  - o. Engineering report titled "Construction Certification Cell B-North Overfill," prepared by NTH Consultants, Ltd., dated September 3, 1999, revised November 13, 1999.
  - p. Engineering report titled "Proposed Liner Design Modification, Oakland Heights Development, Inc., Type II Landfill," prepared by NTH Consultants, Ltd., dated September 8, 1999.
  - q. Engineering plans titled "Oakland Heights Development, Inc., Landfill, Phase 3 Expansion, Revised Construction Permit Plans, Sheet 28," prepared by NTH Consultants, Ltd., dated September 15, 1999.
  - r. Engineering report titled "Construction Certification Phase 2 Expansion Cell C South Type II Sanitary Landfill Oakland Heights Development, Inc., Landfill, Volumes I and II," prepared by NTH Consultants, Ltd., dated October 1999.
  - s. Engineering report titled "Construction Certification Cell C-North Type II Sanitary Landfill Oakland Heights Development, Inc., Landfill, Volumes I and II," prepared by NTH Consultants, Ltd., dated December 1999.

Operating License Number: 9185 Issue Date: October 29, 2008

- t. Engineering report titled "Construction Documentation Report for the Cell C Phase 1 Overfill Area Construction at the Oakland Heights Development, Inc.," prepared by Earth Tech, Inc., dated November 2000.
- u. "Leachate and Gas Condensate Recirculation Plan Oakland Heights Landfill" prepared by NTH, dated December 15, 2000, and received by the MDEQ on September 12, 2001.
- v. Engineering report titled "Construction Documentation Report for Phase 3 Expansion of the Perimeter Berm of Cells B/C and the Phase 1, Cell C, Slope Overfill Area at Oakland Heights Development, Inc.," prepared by Earth Tech. Inc., dated August 2001.
- w. Engineering report titled "Construction Documentation Report for Phase 3 Expansion of the Perimeter Berm of Cell A," prepared by Earth Tech, Inc., and dated October 2002 and revised December 23, 2002.
- x. Engineering report titled "Design improvements to the approved Phase 3 Expansion Construction Permit Plans," prepared by Earth Tech, dated January 22, 2003.
- y. Engineering Plans Revision A titled, "Oakland Heights Development, Inc., Landfill Phase 3 Expansion, Construction Permit Plans," dated March 1999 and revised January 2003.
- z. Engineering report titled "Construction Documentation Report, Oakland Heights Development, Inc., Cell D, Cell D Overliner and Phase 1 Overfill Areas" prepared by Earth Tech, Inc., dated October 2003 and revised December 11, 2003.
- aa. Supplemental engineering document (letter report) titled "Oakland Heights Development, Cell D and Overliner Construction, Construction Documentation Report, Gas Vent Repairs," prepared by Earth Tech, dated January 23, 2004.
- bb. Revised engineering plan sheets 6, 7, 10, 12, 13, and 14, dated April 26, 2005, with revisions dated July 7, and 8, 2005, titled "Oakland Heights Development, Auburn Hills, Michigan, Construction Permit Modification," which revise the respective previously approved "Oakland Heights Development Inc., Construction Permit Application, Phase 4 Vertical Expansion" engineering plan sheets.
- cc. A letter request with the subject "Request For Approval of an Alternate Geocomposite Material" prepared by Golder Associates, Inc., dated May 19, 2008, with an attached product specification sheet from Engineered Synthetic Products, Inc. This request was submitted to the MDEQ via e-mail on May 19, 2008, and a hard copy was received by the MDEQ on May 20, 2008.
- dd. Revised engineering plan sheets numbered 3, 4, and 11 (titled "Excavation Plan," "Liner Grading Plan," and "Leachate Transmission System Plan," respectively) prepared by Golder Associates Inc., dated August 8, 2008, and received by the MDEQ on August 11, 2008.
- 10. Consent Order/Judgment Number: N/A.
- 11. The licensee shall repair any portion of the certified liner or leachate collection system that is found to be deficient or damaged during the term of this license unless determined otherwise by the MDEQ.
- 12. The licensee shall have repairs to any portion of the certified liner or leachate collection system recertified by a registered professional engineer in accordance with R 299.4921 of the Part 115 Rules and approved by the MDEQ before receiving waste in that portion of the certified liner or leachate collection system. The licensee shall submit the recertification to the MDEQ's WHMD, Southeast Michigan District Supervisor, for review and approval.
- 13. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated February 2007, and revised August 2007, and January 2008. The sampling analytical results shall be submitted to the MDEQ's WHMD, Southeast Michigan District Office.

Operating License Number: 9185 Issue Date: October 29, 2008

- 14. Modifications to the approved hydrogeological monitoring plan referenced in Item 13 may be approved, in writing, by the WHMD, Southeast Michigan District Supervisor. Proposed revisions must be submitted in a format specified by the MDEQ.
- 15. Leachate may be recirculated if a leachate recirculation plan has been approved, in writing, by the WHMD, Southeast Michigan District Supervisor.
- 16. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(I) of the Part 115 Rules, may be approved, in writing, by the WHMD, Southeast Michigan District Supervisor.
- 17. Requests for alternate daily cover may be approved, in writing, by the WHMD, Southeast Michigan District Supervisor.
- 18. Leakage Control Criteria:

The active portions of the unit(s) authorized to receive waste by this license is a monitorable unit(s) designed with a double-liner system that is in compliance with the provisions of R 299.4422(3) of the Part 115 Rules and that is capable of detecting and collecting leakage through the primary composite liner. The action flow rate for each unit containing a secondary collection system is 200 gallons/acre/day for Cells A and B, and 25 gallons/acre/day for Cells C and D.

19. VARIANCES: None.

## 20. SPECIAL CONDITIONS:

- a. The licensee shall place a compacted layer of not less than six inches of earthen material, unless an exemption is granted, of suitable cover material on all exposed solid waste by the end of each working day, as required by R 299.4429(1) of the Part 115 Rules. Suitable cover shall be either uncontaminated soil or an alternate cover approved by the WHMD, listed in Item i, below. Alternate cover shall be restricted as indicated in Item ii and applied as per the approved operational plan submitted by the licensee.
  - i. Approved alternate cover shall be any of the following:

	Product/Waste Material	Source 1	Monthly Volume
(1)	Fabrisoil, a non-woven polypropylene fabric	Manufactured by Phillips Fibers Corporation	Varies
(2)	Sanifoam, a foam resin mixture	Manufactured by the 3M Company	Varies
(3)	Concover, a resinated product consisting of paper, wood fibers, and chips	Manufactured by Nicolon Corporation	Varies
(4)	Procover, a non-woven fabric	Manufactured by Nicolon Corporation	Varies
(5)	Amoco 2001, and Amoco 2006, woven polypropylene fabrics	Manufactured by Amoco Oil Company	Varies
(6)	Rusfoam, a spray-on foam	Manufactured by Rusmar Incorporated	Varies
(7)	Environfoam, a resinated foam mixture	Supplied by Environmental Systems, Ltd.	Varies
(8)	Plastic sheeting	Varies	Varies
(9)	Geotextiles	Varies	Varies
(10	))Woven mats	Varies	Varies

Operating License Number: 9185 Issue Date: October 29, 2008

- ii. The above materials are approved for daily cover when used in the following manner:
  - (1) The licensee shall use the material as daily cover only. The material cannot be used for road building or fill in other areas of the Facility's operation.
  - (2) The licensee shall maintain written authorization on-site, from the generator of the material, to use the material as daily cover.
  - (3) The licensee shall only stockpile material in a secure manner within the active cell.
  - (4) This approval does not preclude the licensee from disposing of the material as waste in the active fill area instead of using the material as daily cover.
  - (5) This approval shall immediately become void upon documentation by the MDEQ that the alternate cover is not being used in accordance with the listed conditions, that the alternate cover is not providing the necessary protection, or that the process producing the waste has changed.
  - (6) If the material does not meet the guidelines from Attachment 2 of the WHMD's Operational Memo 115-10, Revision 1, for nonvolatiles, the licensee shall ensure that fugitive dust emissions from this material do not occur. Acceptable methods to ensure fugitive emissions do not occur are:
    - (a) Implement a schedule to wet down material; or
    - (b) Cover the material with a tarp; or
    - (c) Apply an approved foam or other appropriate commercial dust control product.
  - (7) This approval to use alternate cover shall expire upon the expiration of this operating license.
- b. The licensee may recirculate leachate pursuant to a plan titled "Leachate and Gas Condensate Recirculation Plan, Oakland Heights Landfill," dated December 15, 2000.
- c. Any fire incidents that occur at the Facility must be reported to the MDEQ within 48 hours.
- 21. **TERM**: This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by, the Administrative Procedures Act, 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

## **END OF LICENSE**



